Claims

1. A bicyclic amide, carbamate or urea derivative of the formula (I), its tautomeric or stereoisomeric form, or a salt thereof:

$$A \xrightarrow{H} Y \xrightarrow{Y} \frac{1}{m} X \xrightarrow{P} R^1 \quad (1)$$

5 wherein

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A represents

$$Q_3$$
 Q_2
 Q_1
or Q_5

wherein

Q₁ and Q₄ independently represent direct bond or methylene;

Q₂ represents CHR², or CO,

Q₃ represents CHR³, or CO,

wherein

R² represents hydrogen, hydroxy, C₁₋₆ alkoxy, C₁₋₆ alkanoyloxy, or C₁₋₆ alkyl optionally substituted by hydroxy, C₁₋₆ alkoxy, C₁₋₆ alkoxy, C₁₋₆ alkoxy or mono-, di-, or tri- halogen;

R³ represents hydrogen, hydroxy, C₁₋₆ alkoxy, C₁₋₆ alkanoyloxy, or C₁.

6 alkyl optionally substituted by hydroxy, C₁₋₆ alkoxy, C₁₋₆ alkoxy, C₁₋₆ alkoxy or mono-, di-, or tri- halogen;

with the proviso that

Q₁ and Q₄ can not be direct bond at the same time;

R² and R³ can not be hydrogen at the same time;

when Q₁ represents direct bond,

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R³ represents hydroxy, C₁₋₆ alkoxy or C₁₋₆ alkanoyloxy;

Q₅ represents CH or CR⁵,

wherein

R⁵ represents hydroxy, C₁₋₆ alkoxy, C₁₋₆ alkanoyloxy,

or C₁₋₆ alkyl optionally substituted by hydroxy, C₁₋₆ alkoxy,

C₁₋₆ alkanoyloxy or mono-, di-, or tri- halogen;

Q₆ represents CH or CR⁶,

wherein

R⁶ represents hydroxy, C₁₋₆ alkoxy, C₁₋₆ alkanoyloxy,

or C_{1-6} alkyl optionally substituted by hydroxy, C_{1-6} alkoxy,

C₁₋₆ alkanoyloxy or mono-, di-, or tri- halogen;

with the proviso that Q5 and Q6 can not be CH at the same time;

m represents an integer from 0 to 3;

p represents an integer 0 or 1;

15 -X- represents a bond, -O- or -N(\mathbb{R}^4)-,

wherein

R⁴ represents hydrogen or C₁₋₆ alkyl,

with the proviso that when m is 0, -X- represents a bond; and

-Y- represents CH₂, O or NH; and

20 R¹ represents aryl or heteroaryl,

wherein

said aryl and heteroaryl are optionally substituted with one or more substituents independently selected from the group consisting of halogen, nitro, hydroxy, carboxy, cyano, amino, N-(C₁₋₆alkyl)amino, N,N-

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di(C₁₋₆alkyl)amino, N-(C₃₋₈ cycloalkyl)amino, C₁₋₆alkoxycarbonyl, sulfonamide, C₁₋₆ alkanoyl, N-(C₁₋₆alkanoyl)amino, carbamoyl, C₁₋₆ alkylcarbamoyl, C₃₋₈cycloalkyl, heterocycle,

C₁₋₆ alkyl [wherein said alkyl is optionally substituted by cyano, nitro, hydroxy, carboxy, amino, C₁₋₆ alkoxycarbonyl or mono-, di-, or tri-halogen],

C₁₋₆ alkoxy [wherein said alkoxy is optionally substituted by mono-, di-, or tri- halogen],

C₁₋₆ alkylthio [wherein said alkylthio is optionally substituted by mono-, di-, or tri- halogen],

phenyl, benzyl and phenoxy,

[wherein said phenyl, phenyl moiety of said benzyl or phenyl moiety of said phenoxy are optionally substituted by halogen, nitro, hydroxy, carboxy, amino, N-(C_{1-6} alkyl)amino, N,N-di(C_{1-6} alkyl)amino, N-(C_{3-8} cycloalkyl)amino, C_{1-6} alkoxycarbonyl, C_{1-6} alkoxycarbonyl or C_{1-6} alkyl].

2. The bicyclic amide, carbamate or urea derivative of the formula (I), its tautomeric or stereoisomeric form, or a salt thereof as claimed in claim 1,

wherein

20 A represents

$$Q_{3} \qquad Q_{4} \qquad Q_{5} \qquad Q_{5$$

Q₁ and Q₄ represent methylene;

Q₂ represents CHR² or CO,

wherein

- R² represents hydrogen, hydroxy, C₁₋₆ alkoxy, C₁₋₆ alkanoyloxy or C₁₋₆ alkyl optionally substituted by mono-, di-, or tri- halogen;
- Q₃ represents CHR³ or CO,

5 wherein

- R³ represents hydroxy, C₁₋₆ alkoxy, C₁₋₆ alkanoyloxy, or C₁₋₆ alkyl optionally substituted by mono-, di-, or tri- halogen;
- Q₅ represents CH;
- Q₆ represents CR⁶,

10 wherein

- R⁶ represents hydroxy, C₁₋₆ alkoxy, C₁₋₆ alkanoyloxy, or C₁₋₆ alkyl optionally substituted by mono-, di-, or tri- halogen;
- m represents an integer from 0 to 3;
- p represents an integer 0 or 1;
- 15 -X- represents a bond, -O- or - $N(R^4)$ -,

wherein

R⁴ represents hydrogen or C₁₋₆ alkyl,

with the proviso that when m is 0, -X- represents a bond;

- -Y- represents CH₂, O or NH; and
- 20 R¹ represents phenyl, naphthyl, pyridyl, or pyrimidyl,

wherein

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said phenyl, naphthyl, pyridyl or pyrimidyl are optionally substituted with one or more substituents independently selected from the group consisting of halogen, nitro, hydroxy, carboxy, cyano, amino, N-(C₁₋₆alkyl)amino, N,N-di(C₁₋₆alkyl)amino, N-(C₃₋₈ cycloalkyl)amino, C₁₋₆alkoxycarbonyl,

sulfonamide, C₁₋₆ alkanoyl, N-(C₁₋₆alkanoyl)amino, carbamoyl, C₁₋₆ alkyl-carbamoyl, C₃₋₈cycloalkyl, heterocycle,

C₁₋₆ alkyl [wherein said alkyl is optionally substituted by cyano, nitro, hydroxy, carboxy, amino, C₁₋₆ alkoxycarbonyl or mono-, di-, or tri-halogen],

C₁₋₆ alkoxy [wherein said alkoxy is optionally substituted by mono-, di-, or tri- halogen],

C₁₋₆ alkylthio [wherein said alkylthio is optionally substituted by mono-, di-, or tri- halogen],

phenyl, benzyl and phenoxy,

[wherein said phenyl, phenyl moiety of said benzyl or phenyl moiety of said phenoxy are optionally substituted by halogen, nitro, hydroxy, carboxy, amino, N-(C_{1-6} alkyl)amino, N,N-di(C_{1-6} alkyl)amino, N-(C_{3-8} cycloalkyl)amino, C_{1-6} alkoxy-carbonyl, C_{1-6} alkoxycarbonyl or C_{1-6} alkyl].

3. The bicyclic amide, carbamate or urea derivative of the formula (I), its tautomeric or stereoisomeric form, or a salt thereof as claimed in claim 1,

wherein

A represents

Q₁ represents methylene;

Q₄ represents direct bond;

Q₂ represents CHR² or CO,

wherein

R² represents hydroxy, C₁₋₆ alkoxy or C₁₋₆ alkanoyloxy;

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Q₃ represents CHR³,

wherein

R³ represents hydrogen;

- m represents an integer from 0 to 3;
- 5 p represents an integer 0 or 1;
 - -X- represents a bond, -O- or -N(R⁴)-,

wherein

R⁴ represents hydrogen or C₁₋₆ alkyl,

with the proviso that when m is 0, -X- represents a bond;

- 10 -Y- represents CH₂, O or NH; and
 - R¹ represents phenyl, naphthyl, pyridyl, or pyrimidyl,

wherein

said phenyl, naphthyl, pyridyl or pyrimidyl are optionally substituted with one or more substituents independently selected from the group consisting of halogen, nitro, hydroxy, carboxy, cyano, amino, N-(C₁₋₆alkyl)amino, N,N-di(C₁₋₆alkyl)amino, N-(C₃₋₈ cycloalkyl)amino, C₁₋₆alkoxycarbonyl, sulfonamide, C₁₋₆ alkanoyl, N-(C₁₋₆alkanoyl)amino, carbamoyl, C₁₋₆ alkylcarbamoyl, C₃₋₈cycloalkyl, heterocycle,

C₁₋₆ alkyl [wherein said alkyl is optionally substituted by cyano, nitro, hydroxy, carboxy, amino, C₁₋₆ alkoxycarbonyl or mono-, di-, or tri-halogen],

C₁₋₆ alkoxy [wherein said alkoxy is optionally substituted by mono-, di-, or tri- halogen],

C₁₋₆ alkylthio [wherein said alkylthio is optionally substituted by mono-, di-, or tri- halogen],

phenyl, benzyl and phenoxy,

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[wherein said phenyl, phenyl moiety of said benzyl or phenyl moiety of said phenoxy are optionally substituted by halogen, nitro, hydroxy, carboxy, amino, N-(C₁₋₆alkyl)amino, N,N-di(C₁₋₆alkyl)amino, N-(C₃₋₈ cycloalkyl)amino, C₁₋₆ alkoxycarbonyl, C₁₋₆ alkoxycarbonyl or C₁₋₆ alkyl].

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4. The bicyclic amide, carbamate or urea derivative of the formula (I), its tautomeric or stereoisomeric form, or a salt thereof as claimed in claim 1,

wherein

A represents

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Q₁ and Q₄ represents methylene;

Q₂ represents CHR²,

wherein

R² represents hydrogen;

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Q₃ represents CHR³,

wherein

- R³ represents hydrogen, hydroxy, C₁₋₆ alkoxy or C₁₋₆ alkanoyloxy;
- m represents an integer from 0 to 3;
- p represents an integer 0 or 1;
- 20 -X- represents a bond, -O- or -N(R⁴)-,

wherein R⁴ is hydrogen or C₁₋₆ alkyl,

with the proviso that when m is 0, -X- represents a bond;

-Y- represents CH2, O or NH; and

R¹ represents phenyl, naphthyl, pyridyl, or pyrimidyl,

wherein

said phenyl, naphthyl, pyridyl or pyrimidyl are optionally substituted with one or more substituents independently selected from the group consisting of halogen, nitro, hydroxy, carboxy, cyano, amino, N- $(C_{1-6}$ alkyl)amino, N- $(C_{1-6}$ alkyl)amino, N- $(C_{1-6}$ alkyl)amino, C₁₋₆alkoxycarbonyl, sulfonamide, C₁₋₆ alkanoyl, N- $(C_{1-6}$ alkanoyl)amino, carbamoyl, C₁₋₆alkylcarbamoyl, C₃₋₈cycloalkyl, heterocycle,

C₁₋₆ alkyl [wherein said alkyl is optionally substituted by cyano, nitro, hydroxy, carboxy, amino, C₁₋₆ alkoxycarbonyl or mono-, di-, or tri-halogen],

C₁₋₆ alkoxy [wherein said alkoxy is optionally substituted by mono-, di-, or tri- halogen],

C₁₋₆ alkylthio [wherein said alkylthio is optionally substituted by mono-, di-, or tri- halogen],

phenyl, benzyl and phenoxy,

[wherein said phenyl, phenyl moiety of said benzyl or phenyl moiety of said phenoxy are optionally substituted by halogen, nitro, hydroxy, carboxy, amino, N- $(C_{1-6}$ alkyl)amino, N,N-di $(C_{1-6}$ alkyl)amino, N- $(C_{3-8}$ cycloalkyl)amino, C_{1-6} alkoxy-carbonyl, C_{1-6} alkoxy-carbonyl or C_{1-6} alkoxy-length of C_{1-6} alkoxy-carbonyl or C_{1-6} alkoxy-length or C_{1-6} alkyl].

5. The bicyclic amide, carbamate or urea derivative of the formula (I), its tautomeric or stereoisomeric form, or a salt thereof as claimed in claim 1,

wherein

25 A represents

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Q₁ and Q₄ represent methylene;

Q₂ represents CHR²,

wherein

R² represents hydroxy, C₁₋₆ alkoxy or C₁₋₆ alkanoyloxy;

Q₃ represents CHR³,

wherein

R³ represents hydrogen;

m represents an integer from 1 to 3;

p represents 0 or 1;

-X- represents a bond, -O- or -N(R⁴)-,

wherein

R4 is hydrogen or C1-6 alkyl,

with the proviso that when m is 0, -X- represents a bond;

15 -Y- represents CH₂, O or NH; and

R¹ represents phenyl, naphthyl, pyridyl, or pyrimidyl,

wherein

said phenyl, naphthyl, pyridyl or pyrimidyl are optionally substituted with one or more substituents independently selected from the group consisting of halogen, nitro, hydroxy, carboxy, cyano, amino, N- $(C_{1-6}$ alkyl)amino, N- $(C_{1-6}$ alkyl)amino, N- $(C_{1-6}$ alkyl)amino, C₁₋₆alkoxycarbonyl, sulfonamide, C₁₋₆ alkanoyl, N- $(C_{1-6}$ alkanoyl)amino, carbamoyl, C₁₋₆alkylcarbamoyl, C₃₋₈cycloalkyl, heterocycle,

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C₁₋₆ alkyl [wherein said alkyl is optionally substituted by cyano, nitro, hydroxy, carboxy, amino, C₁₋₆ alkoxycarbonyl or mono-, di-, or tri-halogen],

C₁₋₆ alkoxy [wherein said alkoxy is optionally substituted by mono-, di-, or tri- halogen],

C₁₋₆ alkylthio [wherein said alkylthio is optionally substituted by mono-, di-, or tri-halogen],

phenyl, benzyl and phenoxy,

[wherein said phenyl, phenyl moiety of said benzyl or phenyl moiety of said phenoxy are optionally substituted by halogen, nitro, hydroxy, carboxy, amino, N-(C_{1-6} alkyl)amino, N,N-di(C_{1-6} alkyl)amino, N-(C_{3-8} cycloalkyl)amino, C_{1-6} alkoxy-carbonyl, C_{1-6} alkoxycarbonyl or C_{1-6} alkyl].

6. The bicyclic amide, carbamate or urea derivative of the formula (I), its tautomeric or stereoisomeric form, or a salt thereof as claimed in claim 1,

wherein

A represents

Q₅ represents CH;

Q₆ represent CR⁶,

wherein

 R^6 represents hydroxy, C_{1-6} alkoxy, C_{1-6} alkanoyloxy, or C_{1-6} alkyloptionally substituted by hydroxy, C_{1-6} alkoxy or C_{1-6} alkanoyloxy;

- m represents an integer from 0 to 3;
- p represents an integer 0 or 1;

-X- represents a bond, -O- or -N(R4)-,

wherein

R⁴ represents hydrogen or C₁₋₆ alkyl,

with the proviso that when m is 0, -X- represents a bond;

5 -Y- represents NH, O or CH₂; and

R¹ represents phenyl, naphthyl, pyridyl, or pyrimidyl,

wherein

said phenyl, naphthyl, pyridyl, or pyrimidyl are optionally substituted by one or two of substituents selected from the group consisting of halogen, nitro, C_{1-6} alkyl, trifluoro C_{1-6} alkyl, C_{1-6} alkoxy, trifluoro C_{1-6} alkoxy and C_{1-6} alkoxylamino.

7. The bicyclic amide, carbamate or urea derivative of the formula (I), its tautomeric or stereoisomeric form, or a salt thereof as claimed in claim 1,

wherein

A represents

$$Q_3$$
 Q_2
 Q_1
or Q_5

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Q₁ and Q₄ represents methylene;

Q₂ represents CHR²,

wherein

R² represents hydrogen;

20 Q₃ represents CHR³,

wherein

R³ represents hydrogen, hydroxy, C₁₋₆ alkoxy or C₁₋₆ alkanoyloxy;

- Q₅ represents CH;
- Q₆ represents CR⁶,

wherein

R⁶ represents hydroxy;

- 5 m represents an integer 2;
 - p represents an integer 0;
 - -X- represents a bond, -O- or -N(R⁴)-,

wherein

R4 is hydrogen or C1-6 alkyl,

with the proviso that when m is 0, -X- represents a bond;

- -Y- represents NH or O; and
- R¹ represents phenyl, naphthyl, pyridyl, or pyrimidyl,

wherein

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said phenyl, naphthyl, pyridyl, or pyrimidyl are optionally substituted by one or two of substituents selected from the group consisting of chloro, bromo, fluoro, nitro, methyl, methoxy, trifluoromethyl, trifluoroethyl, trifluoromethoxy, trifluoroethoxy, acetamido and propionylamino;

8. The bicyclic amide, carbamate or urea derivative of the formula (I), its tautomeric or stereoisomeric form, or a salt thereof as claimed in claim 1, wherein said bicyclic amide, carbamate or urea derivative of the formula (I) is selected from the group consisting of:

N-(7-hydroxy-5,6,7,8-tetrahydronaphthalen-2-yl)-N'-[4-(trifluoromethyl)benzyl]urea;

4-(trifluoromethyl)benzyl(7-hydroxy-5,6,7,8-tetrahydronaphthalen-2-yl)carbamate;

N-(7-hydroxy-5,6,7,8-tetrahydronaphthalen-2-yl)-3-[4-(trifluoromethyl)phenyl]propanamide;

N-(7-hydroxy-5,6,7,8-tetrahydronaphthalen-2-yl)-N'-(2-{[4-(trifluoromethyl)phenyl]-amino}ethyl)urea;

N-(7-hydroxy-5,6,7,8-tetrahydronaphthalen-2-yl)-N'-{2-[4-(trifluoromethyl)phenoxy]-ethyl}urea;

5 2-{[4-(trifluoromethyl)phenyl]amino}ethyl(7-hydroxy-5,6,7,8-tetrahydronaphthalen-2-yl)carbamate;

2-[4-(trifluoromethyl)phenoxy]ethyl(7-hydroxy-5,6,7,8-tetrahydronaphthalen-2-yl)carbamate;and

N-[4-chloro-3-(trifluoromethyl)phenyl]-N'-(7-hydroxy-5,6,7,8-tetrahydronaphthalen-2-yl)urea;

N-(2-{[4-chloro-3-(trifluoromethyl)phenyl]amino}ethyl)-N'-(7-hydroxy-5,6,7,8-tetrahydronaphthalen-2-yl)urea;

 $N-\{2-[4-chloro-3-(trifluoromethyl)phenoxy]ethyl\}-N-(7-hydroxy-5,6,7,8-tetrahydronaphthalen-2-yl)urea;\\$

N-(2-{[4-chloro-3-(trifluoromethyl)phenyl]amino}ethyl)-N'-(6-hydroxy-5,6,7,8-tetrahydronaphthalen-2-yl)urea; and

N-{2-[4-chloro-3-(trifluoromethyl)phenoxy]ethyl}-N'-(6-hydroxy-5,6,7,8-tetrahydronaphthalen-2-yl)urea

- A medicament comprising the bicyclic amide, carbamate or urea derivative of the formula
 (I), its tautomeric or stereoisomeric form, or a physiologically acceptable salt thereof as claimed in claim 1 as an active ingredient.
 - 10. The medicament as claimed in claim 9, further comprising one or more pharmaceutically acceptable excipients.
- 11. The medicament as claimed in claim 9, wherein said bicyclic amide, carbamate or urea derivative of the formula (I), its tautomeric or stereoisomeric form, or a physiologically acceptable salt thereof is a VR1 antagonist.
 - 12. The medicament as claimed in claim 9 for the treatment and/or prevention of an urological disorder or disease.

- 13. The medicament as claimed in claim 12, wherein said urological disorder or disease is urge urinary incontinence or overactive bladder.
- 14. The medicament as claimed in claim 9 for the treatment and/or prevention of pain.
- 15. The medicament as claimed in claim 14, wherein said pain is chronic pain, neuropathic pain, postoperative pain, or rheumatoid arthritic pain.
 - 16. The medicament as claimed in claim 9 for the treatment and/or prevention of a disorder or disease related to pain.
 - 17. The medicament as claimed in claim 16, wherein said disorder or disease related to pain is neuralgia, neuropathies, algesia, nerve injury, ischaemia, neurodegeneration, or stroke.
- 10 18. The medicament as claimed in claim 9 for the treatment and/or prevention of an inflammatory disorder or disease.
 - 19. The medicament as claimed in claim 18, wherein said inflammatory disorder or disease is asthma or COPD.
- Use of compounds according to claim 1 for manufacturing a medicament for the treatment
 and/or prevention of an urological disorder or disease.
 - 21. Use of compounds according to claim 1 for manufacturing a medicament for the treatment and/or prevention of pain.
 - 22. Use of compounds according to claim 1 for manufacturing a medicament for the treatment and/or prevention of an inflammatory disorder or disease.
- 20 23. Process for controlling an urological disorder or disease in humans and animals by administration of a VR1-antagonistically effective amount of at least one compound according to claim 1.
 - 24. Process for controlling pain in humans and animals by administration of a VR1antagonistically effective amount of at least one compound according to claim 1.
- 25 25. Process for controlling an inflammatory disorder or disease in humans and animals by administration of a VR1-antagonistically effective amount of at least one compound according to claim 1.